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Title	*Computational Studies in Conical Antenna Array for Non-planar Conformal Configurations*
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Abstract:

This report focuses on the pattern synthesis of antenna array placed on the surface of revolution. Under wide range of conditions, the radiation patterns of ring array can be obtained by the array space factor by partial differentiation. Two types of slot arrangement in ring arrays viz. horizontal and inclined vertical slot array are considered. Simulation study is further extended for the conical antenna arrays. The purpose of conical array is to narrow the elevation beamwidth of an arc or ring array. Moreover these antenna systems are capable of scanning the target in required direction with less inertia. Their geometries provide nearly hemispherical coverage resulting optimum directivity and less grating lobes. Computed results are validated against those available in open literature.